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Application No: 10552686 Version No: 3.0

Input Set:

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<150> PCT/EP04/50513

<151> 2004-04-13

<150> EP 03076064.9

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atacaatgtt taaagaggaa aaggttatac gaacagcaag tcgagcaggt tgggaatttt	480
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<213> Beta vulgaris

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          20          25          30

Thr Leu Glu Met Leu Glu Lys Lys Glu Gln Leu Leu Met Lys Lys Ala
          35          40          45

Thr Ala Glu Val Glu Lys Ala Lys Glu Phe Thr Arg Ala Lys Asn Lys
          50          55          60

Arg Ala Ala Ile Gln Cys Leu Lys Arg Lys Arg Leu Tyr Glu Gln Gln
65          70          75          80

Val Glu Gln Val Gly Asn Phe Gln Leu Arg Ile His Asp Gln Ile Ile
          85          90          95

Met Leu Asp Ser Ala Lys Ala Thr Thr Glu Thr Val Ala Ala Leu Arg
          100          105          110

Ser Gly Ala Ser Ala Met Lys Ala Met Gln Lys Ala Thr Asn Ile Asp
          115          120          125

Asp Val Asp Lys Thr Met Asp Glu Ile Asn Glu Gln Thr Asp Asn Leu
          130          135          140

Arg Gln Ile Gln Glu Ala Leu Ala Thr Pro Val Gly Ala Thr Asp Phe
145          150          155          160

Asp Glu Asp Glu Leu Glu Ala Glu Leu Glu Glu Leu Glu Gly Ala Glu
          165          170          175

Leu Glu Glu Gln Leu Leu Gln Pro Phe Thr Thr Ala Pro Thr Ala Pro
          180          185          190

Ile His Val Pro Glu Gly Lys Leu Pro Ala Arg Pro Thr Pro Gln Lys
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Asn Ser Glu Glu Asp Glu Leu Ala Ala Leu Gln Ala Glu Met Ala Leu
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<210> 4

<211> 154

<212> PRT

<213> Beta vulgaris

<400> 4

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Lys Glu Gln Val Leu Leu Lys Lys Ala Gly Ala Glu Val Glu Lys Ala
          35           40           45

Lys Glu Phe Thr Arg Ala Lys Asn Lys Arg Ala Ala Ile Thr Cys Leu
          50           55           60

Lys Arg Lys Arg Leu Tyr Glu Gln Gln Ile Glu Gln Leu Gly Asn Met
65           70           75           80

Gln Leu Arg Ile His Asp Gln Met Ile Leu Leu Glu Gly Ala Lys Ala
          85           90           95

Thr Thr Glu Thr Val Asp Ala Leu Arg Ser Gly Ala Ser Ala Met Lys
          100          105          110

Ala Met Gln Lys Ala Thr Asn Ile Asp Asn Val Asp Lys Thr Met Asp
          115          120          125
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Ser Ala Pro Ile Gly Ala Ala Ala Asp Phe
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<210> 5
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 <212> DNA
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 <223> n is a, c, g, or t

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 cgtcaatctc gtaagtgcga gaaagaagaa aaagctgaga aactcaaagt caagaaagca 180
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Lys Ala Glu Lys Leu Lys Val Lys Lys Ala Ile Glu Lys Gly Asn Met
 35 40 45

Asp Gly Ala Arg Ile Tyr Ala Glu Asn Ala Ile Arg Lys Arg Thr Glu

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Gln Met Asn Tyr Leu Arg Leu Ala Ser Arg Leu Asp Ala Val Val Ser		
65	70	75 80
Arg Leu Asp Thr Gln Ala Lys Met Gln Thr Ile Gly Lys Ser Met Gly		
	85	90 95
Ser Ile Val Lys Ser Leu Glu Ser Ser Leu Asn Thr Gly Asn Leu Gln		
	100	105 110
Lys Met Ser Glu Thr Met Asp Asn Phe Glu Lys Gln Phe Val Asn Met		
	115	120 125
Glu Val Gln Ala Glu Phe Met Glu Ser Ser Met Ala Gly Ser Thr Ser		
	130	135 140
Leu Ser Thr Pro Glu Thr Glu Val Asn Ser Leu Met Gln Gln Val Ala		
145	150	155 160
Asp Asp Tyr Gly Leu Glu Val Ser Val Gly Leu Pro Gln Ala Ala Gly		
	165	170 175
His Ala Ile Pro Val Pro Lys Ala Ala Glu Lys Val Asp Glu Asp Asp		
	180	185 190
Leu Thr Arg Arg Leu Ala Glu Leu Lys Ala Arg Gly		
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 <212> DNA
 <213> Beta vulgaris

<220>
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 <222> (2)..(3)
 <223> n is a, c, g, or t

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ctacatagaa aggctctcga ggacttgaag aaacttattc aagaagccct cgagaagcac	360
gagttctctt ctctctctcc tccgcctccg cctgctccag ctaaagttga ggagaaggcg	420
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<210> 8
<211> 427
<212> PRT
<213> Beta vulgaris

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          20          25          30

Leu Pro Pro Glu Ala Glu Lys Leu Ala Ala Ala Glu Ser Ala Glu Ala
          35          40          45

Glu Lys Pro Ala Asp Ser Ala Glu Ala Lys Ile Ala Gln Gln Val Ser
          50          55          60

Phe Lys Glu Glu Thr Asn Val Ala Ser Glu Leu Pro Glu Leu His Arg
65          70          75          80

Lys Ala Leu Glu Asp Leu Lys Lys Leu Ile Gln Glu Ala Leu Glu Lys
          85          90          95

His Glu Phe Ser Ser Pro Pro Pro Pro Pro Pro Pro Ala Pro Ala Lys
          100          105          110

Val Glu Glu Lys Ala Glu Glu Lys Lys Glu Glu Gln Pro Pro Ser Thr
          115          120          125

Thr Ser Thr Thr Thr Thr Thr Thr Thr Ala Val Ser Asp Glu Val Ala
          130          135          140

Val Ala Pro Pro Ser Glu Glu Ala Pro Lys Thr Asp Glu Ala Ser Pro
145          150          155          160

Lys Val Glu Glu Glu Pro Ala Lys Ile Val Glu Gln Pro Pro Thr Thr
          165          170          175

Pro Ala Glu Glu Pro Glu Pro Ala Lys Thr Pro Glu Val Val Val Ala
          180          185          190

Glu Glu Glu Lys Thr Gly Glu Asp Ile Lys Glu Thr Ile Val Val Glu
          195          200          205

Val Ala Thr Thr Thr Ala Ala Pro Val Leu Thr Glu Pro Glu Ser Val

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210	215	220
Glu Glu Thr Pro Lys	Glu Ala Glu Val Val Val	Glu Glu Ser Pro Lys
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Arg Ser Asp Val Ile Leu Leu Lys Phe Leu Arg Ala Arg Asp Tyr Arg		
	260	265 270
Val Lys Asp Ala Phe Thr Met Ile Arg Asn Thr Ala Arg Trp Arg Lys		
	275	280 285
Glu Phe Glu Val Asp Ser Leu Leu Asp Glu Asp Leu Gly Asn Asp Tyr		
	290	295 300
Glu Lys Val Val Phe Thr His Gly Val Asp Lys Gln Gly Arg Pro Val		
	305	310 315 320
Cys Tyr Asn Val Phe Gly Glu Phe Gln Asn Lys Glu Leu Tyr Gln Asn		
	325	330 335
Thr Phe Ser Asp Ala Glu Lys Arg Lys Lys Phe Leu Arg Trp Leu Ile		
	340	345 350
Gln Phe Leu Glu Lys Thr Ile Arg Thr Leu Asp Phe Ser Pro Glu Gly		
	355	360 365
Ile Asn Ser Phe Val Leu Val Asn Asp Leu Lys Asn Ser Pro Gly Tyr		
	370	375 380
Gly Lys Arg Asp Leu Tyr Lys Val Ile Asp Lys Phe Leu Glu Ile Leu		
	385	390 395 400
Gln Asp Asn Tyr Pro Glu Phe Ala Ala Lys Gln Leu Cys Ile Asn Val		
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Ser Trp Trp Ser Trp His Thr Thr Gly Ser Ile		
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 <212> DNA
 <213> Beta vulgaris

<220>
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actgccttct	aatcttgaca	ctgattcaga	aatgtgcagt	cttcaagatg	aatccgagga	480
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